

REMARKS

Claims 4, 6, 7 and 9-14 stand rejected under 35 U.S.C. Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 10 and 12 stand rejected under 35 U.S.C. Section 112, second paragraph, as depending on an indefinite antecedent claim. Claims 1-14 are rejected under 35 U.S.C. Section 103(a) as being anticipated by U.S. Patent No. 6,504,483 to Richards et al. (hereinafter "Richards"). Claims 1-8 are rejected under 35 U.S.C. Section 103(a) as being as being anticipated by U.S. Patent Number 6,567,038 to Granot et al. (hereinafter "Granot"). Claims 9-14 are rejected under 35 U.S.C. Section 102(b) as being as being anticipated by U.S. Patent Number 5,914,481 to Danielson et al. (hereinafter "Danielson").

Applicant hereby amends claims 4-10, 12 and 14. Support for the claim amendments may be found in the originally filed specification. No new matter is added by these amendments. Claims 1, 2, 3, 11 and 13 are hereby deleted, without prejudice to Applicant's right to pursue these claims in this or another application.

Claims 4-10, 12 and 14 are now presented for examination. Reconsideration of the amended claims is respectfully requested.

Rejection of claims 4, 6, 7, 9, 10, 12, and 14 under 35 U.S.C. Section 112

Claims 4, 6, 7, 9, 10, 12, and 14 are rejected under 35 U.S.C. Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 10 and 12 are rejected under 35 U.S.C. Section 112, second paragraph, as being dependent on an indefinite antecedent claim.

Claims 4, 6, 7, 9, and 14 have been amended to particularly point out and distinctly claim the subject matter of the invention. Additionally, amended dependent claims 10 and 12 are allowable as depending upon amended independent claim 9.

Rejection of claims 4-10, 12, and 14 under 35 U.S.C. Section 103(a) (as anticipated by Richards)

Amended claim 4 recites a computer-based system for providing automated extensions to established gaming and wagering applications using spatial tracking data (such as presented in US 6,204,813, commonly owned), specifically including conditional, derivative, and combinational bets such that derivative wagering is defined to be the category of all wagers derived from mathematical combinations of other wagers, e.g., an outcome that is the algebraic sum of two or more other outcomes; conditional wagering is a special category of derivative wagers wherein a wager is conditioned upon a particular future event, e.g., selecting a particular horse to win a race subject to the pre-specified future condition that it must lead another particular horse at by a specified interval at a specified point of the race; and, combinatorial wagering is a wager that is placed contingent upon the pre-specified result of another wager, e.g., selecting a particular horse to finish in third place only if a particular horse wins.

Richards describes a system, electronic monitor and method that utilize the communication capabilities and positioning capabilities of impulse radio technology to enable people to track a position of a horse as it moves around a race track and/or to enable people to monitor one or more vital signs of the moving horse (see col. 22 lines 7-60). The claimed improvement over the state-of-art is attributable, in part, to the use of an emerging, revolutionary ultra wideband technology (UWB) called impulse radio communication technology (also known as impulse radio) (see col. 3 line 57 – col. 4 line 27).

Amended claim 4 describes a system for providing automated extensions to established gaming and wagering applications using spatial tracking data. Richards does not teach or suggest a method of extending established wagering applications to include conditional, derivative, and combinational bets as described in the amended claim 4. Instead, Richards teaches only using impulse radio technology in various forms to enable people (e.g., broadcasters, fans, trainers, jockeys) to track a position of a horse as it moves around a race track and/or to enable people to monitor one or more vital signs of the moving horse.

Furthermore, applicant's invention does not rely on impulse radio to enable tracking of positions of a horse as it moves around a racetrack not does it rely on impulse radio for monitoring one or more vital signs of the moving horse. Additionally, applicant references US Patent Number 6,204,813 which establishes commonly owned prior art (U.S. 6,204,813) describing a system and method for local area multiple object tracking that is adaptable to sports including horse racing. Thus, the applicant's invention teaches specifically a system and method for using such data to enable new wager types, not a system or method for tracking said objects.

Richards does not teach, suggest, or motivate any such wagering extensions. Hence, amended independent claim 4 is patentable over Richards. Amended claims 5-8 are allowable as depending on independent claim 4.

Amended claim 9 recites a method for providing automated extensions to established gaming and wagering applications using spatial tracking data (such as presented in US 6,204,813, commonly owned), specifically including conditional, derivative, and combinational bets such that derivative wagering is defined to be the category of all wagers derived from mathematical combinations of other wagers, e.g., an outcome that is the algebraic sum of two or more other outcomes; conditional wagering is a special category of derivative wagers wherein a wager is conditioned upon a particular future event, e.g., selecting a particular horse to win a race subject to the pre-specified future condition that it must lead another particular horse at by a specified interval at a specified point of the race; and, combinatorial wagering is a wager that is placed contingent upon the pre-specified result of another wager, e.g., selecting a particular horse to finish in third place only if a particular horse wins.

Claim 9 has been amended to describe a method for providing automated extensions to established gaming and wagering applications using spatial tracking data. Richards does not teach or suggest a method of extending established wagering applications to include conditional, derivative, and combinational bets as described in the amended claim 9. Instead, Richards teaches only using impulse radio technology in various forms to enable people (e.g., broadcasters, fans, trainers, jockeys) to track a position of a horse as it moves around a race track and/or to enable people to monitor one or more vital signs of the moving horse.

Furthermore, applicant's invention does not rely on impulse radio to enable tracking of positions of a horse as it moves around a racetrack not does it rely on impulse radio for monitoring one or more vital signs of the moving horse. Additionally, applicant references US Patent Number 6,204,813 which establishes commonly owned prior art (U.S. 6,204,813) describing a system and method for local area multiple object tracking that is adaptable to sports including horse racing. Thus, the applicant's invention teaches a method for using such data to enable new wager types, not a method or system for tracking said objects.

Richards does not teach, suggest, or motivate any such wagering extensions. Hence, amended independent claim 9 is patentable over Richards. Amended claims 10, 12, and 14 are allowable as depending on independent claim 9.

Rejection of claims 4-10, 12, and 14 under 35 U.S.C. Section 103(a) (as anticipated by Granot)

Amended claim 4 recites a method of providing automated extensions to established gaming and wagering applications using spatial tracking data (such as presented in US 6,204,813, commonly owned), specifically including conditional, derivative, and combinational bets such that derivative wagering is defined to be the category of all wagers derived from mathematical combinations of other wagers, e.g., an outcome that is the algebraic sum of two or more other outcomes; conditional wagering is a special category of derivative wagers wherein a wager is conditioned upon a particular future event, e.g., selecting a particular horse to win a race subject to the pre-specified future condition that it must lead another particular horse at by a specified interval at a specified point of the race; and, combinatorial wagering is a wager that is placed contingent upon the pre-specified result of another wager, e.g., selecting a particular horse to finish in third place only if a particular horse wins.

Granot describes a cooperative tracking system designed to track multiple cooperative targets within a given field in real time with high precision and high update rate comprises a microwave transmitter and two receivers with each target being provided with one or more coded microwave transponders which enable calculation of position and speed, and in a preferred embodiment, direction of movement of each target. The system is based on microwave modules and tracking algorithms to achieve player location in every video frame. The system is described as being synchronized to a calibrated video camera, allowing instant digital and virtual replay (see col. 2 lines 36-63).

The system described by Granot provides ability to track a player, within the designated field, who is wearing a miniature ID tag (see col. 3 lines 41-45). Much attention is given to the integration of the tracking system with the video cameras and the graphics computer. Successful integration means a synchronized system, enabling instant transformation from field coordinates to pixel location in each single frame (see col. 5 lines 14-21). TV broadcasts of sports events use different graphic effects such as highlighting a player, marking his trail, measuring his position, and more. In order to display the graphics on the screen in real-time, or instant replay, the object's position must be known. Current methods of tracking allow image tracking but have the disadvantage of working off-line and most methods lack robustness. Thus, it takes a long time to track a player from a video clip, and the user must supervise the process.

Claim 4 has been amended to include a method of providing automated extensions to established gaming and wagering applications using spatial tracking data. Granot does not teach or suggest a method of extending established wagering applications to include conditional, derivative, and combinational bets as described in the

amended claim 4. Instead, Granot teaches only a method of calculating position, and speed if desired, on a playing surface, and more specifically, within a video frame. Granot focuses on various entertainment uses of the data, but makes no mention of prediction simulation nor gaming applications, including derivative-based wagering, which is the focus of Applicant's application. Granot depends on video-synchronized microwave transponders. Applicant's invention relies on commonly owned prior art (U.S. 6,204,813), and seeks to specifically establish wagering methods and extensions to existing wagering applications.

Furthermore, applicant's invention does not rely on the video-synchronized microwave transponder system described by Granot to enable tracking of positions of a horse as it moves around a racetrack. Additionally, applicant references US Patent Number 6,204,813 which establishes a system and method for local area multiple object tracking that is adaptable to sports including horse racing. Thus, the applicant's invention teaches a system and method for using such data to enable new wager types, not a method or system for tracking said objects.

Granot does not teach, suggest, or motivate any such wagering extensions. Hence, amended independent claim 4 is patentable over Granot. Amended claims 5-8 are allowable as depending on independent claim 4.

Amended claim 9 recites a method of providing automated extensions to established gaming and wagering applications using spatial tracking data (such as presented in US 6,204,813, commonly owned), specifically including conditional, derivative, and combinational bets such that derivative wagering is defined to be the category of all wagers derived from mathematical combinations of other wagers, e.g., an outcome that is the algebraic sum of two or more other outcomes; conditional wagering is a special category of derivative wagers wherein a wager is conditioned upon a particular future event, e.g., selecting a particular horse to win a race subject to the pre-specified future condition that it must lead another particular horse at by a specified interval at a specified point of the race; and, combinatorial wagering is a wager that is placed contingent upon the pre-specified result of another wager, e.g., selecting a particular horse to finish in third place only if a particular horse wins.

Granot describes a cooperative tracking system designed to track multiple cooperative targets within a given field in real time with high precision and high update rate comprises a microwave transmitter and two receivers with each target being provided with one or more coded microwave transponders which enable calculation of both position, speed and in a preferred embodiment direction of movement of each target. The system is based on microwave modules and tracking algorithms to achieve player location in every video frame. The system is described as being synchronized to a calibrated video camera, allowing instant digital and virtual replay (see col. 2 lines 36-63).

The system described by Granot provides ability to track a player, within the designated field, who is wearing a miniature ID tag (see col. 3 lines 41-45). Much attention is given to the integration of the tracking system with the video cameras and the graphics computer. Successful integration means a synchronized system, enabling instant transformation from field coordinates to pixel location in each single frame (see col.5 lines 14-21). TV broadcasts of sports events use different graphic effects such as highlighting a player, marking his trail, measuring his position, and more. In order to display the graphics on the screen in real-time, or instant replay, the object's position must be known. Current methods of tracking allow image tracking but have the disadvantage of working off-line and most methods lack robustness. Thus, it takes a long time to track a player from a video clip, and the user must supervise the process.

Claim 9 has been amended to include a method of providing automated extensions to established gaming and wagering applications using spatial tracking data. Granot does not teach or suggest a method of extending established wagering applications to include conditional, derivative, and combinational bets as described in the amended claim 9. Instead, Granot teaches only a method of calculating position, and speed if desired, on a playing surface, and more specifically, within a video frame. Granot focuses on various entertainment uses of the data, but makes no mention of prediction simulation nor gaming applications, including derivative-based wagering, which is the focus of Applicant's application. Granot depends on video-synchronized microwave transponders. Applicant's invention relies on commonly owned prior art (U.S. 6,204,813), and seeks to specifically establish wagering methods and extensions to existing wagering applications.

Furthermore, applicant's invention does not rely on the video-synchronized microwave transponder system described by Granot to enable tracking of positions of a horse as it moves around a racetrack. Additionally, applicant references US Patent Number 6,204,813 which establishes a system and method for local area multiple object tracking that is adaptable to sports including horse racing. Thus, the applicant's invention teaches a system and method for using such data to enable new wager types, not a method or system for tracking said objects.

Granot does not teach, suggest, or motivate any such wagering extensions. Hence, amended independent claim 9 is patentable over Granot. Amended claims 10, 12, and 14 are allowable as depending on independent claim 9.

Rejection of claims 9, 10, 12, and 14 under 35 U.S.C. Section 103(a) (as anticipated by Danielson)

Amended claim 9 recites a method for providing automated extensions to established gaming and wagering applications using spatial tracking data (such as presented in US 6,204,813, commonly owned), specifically including conditional, derivative, and combinational bets such that derivative wagering is defined to be the category of all wagers derived from mathematical combinations of other wagers, e.g., an outcome that is the algebraic sum of two or more other outcomes; conditional wagering is a special category of derivative wagers wherein a wager is conditioned upon a particular future event, e.g., selecting a particular horse to win a race subject to the pre-specified future condition that it must lead another particular horse at by a specified interval at a specified point of the race; and, combinatorial wagering is a wager that is placed contingent upon the pre-specified result of another wager, e.g., selecting a particular horse to finish in third place only if a particular horse wins.

Danielson describes a pocket-sized hand-held data processing device with a coupling system, a user interface and an optical indicia reader. The device can include a display for alphanumeric information. The display can have a touch screen input area and a handwritten input area. The display can display information for right-handed or left-handed use. The user interface covers a major portion of the frontal side of the device. The system can be spanned by one hand when held.

Claim 9 has been amended to include a method for providing automated extensions to established gaming and wagering applications using spatial tracking data. Richards does not teach or suggest a method of extending established wagering applications to include conditional, derivative, and combinational bets as described in the amended claim 9. Instead, Richards teaches only using impulse radio technology in various forms to enable people

(e.g., broadcasters, fans, trainers, jockeys) to track a position of a horse as it moves around a race track and/or to enable people to monitor one or more vital signs of the moving horse.

Danielson does not teach, suggest, or motivate wagering applications specifically. Rather, Danielson describes a device for displaying various data using a coupling system, a user interface, and an optical indicia reader. Although Applicant references samples of various displays, the Applicant's invention teaches a new system and method for wagering applications using spatial tracking data. The Applicant's invention makes no claim to the uniqueness of specific devices or displays for the display of such data.

Danielson does not teach, suggest, or motivate any such wagering extensions. Hence, amended independent claim 9 is patentable over Danielson. Amended claims 10, 12, and 14 are allowable as depending on independent claim 9.

Danielson, Granot, and Richards, taken independently or in combination with each other, do not teach or suggest the system and method recited in amended independent claims 4 and 9. Instead, the cited prior art of Danielson, Granot, and Richards establishes various means for tracking of athletes or animals. Applicant's invention provides a novel system and method for using such data, and references at least one means unrelated to the works of Danielson, Granot, and Richards, namely commonly owned U.S. 6,204,813, to provide the capability of gathering the data required to implement the data inputs for the Applicant's invention and related claims.

Hence, amended independent claims 4 and 9 are patentable over Danielson, in view of Granot and/or Richards and are therefore allowable. Furthermore, amended dependent claims 5-8 are allowable as depending on allowable amended claim 4, and amended dependent claims 10, 12, and 14 are allowable as depending on allowable amended claim 9.

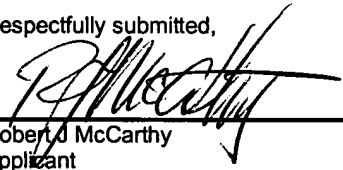
CONCLUSION

Claims 4-10, 12, and 14 are herein amended. Claims 1-3, 11, and 13 are canceled without prejudice. Objected to claims 10 and 12 now depend upon amended base claims. In view of the above remarks and amendments, reconsideration of the claims and withdrawal of the rejections is respectfully requested.

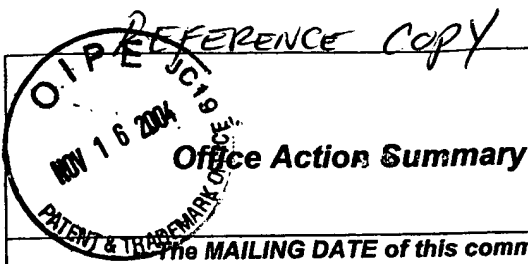
As the applicant, I believe that the subject application is in condition for allowance and respectfully request early favorable action by the Examiner. The Examiner is encouraged to contact Applicant by telephone or email if it would in any way aid in the advancement of this application to issue.

Dated: September 30, 2004 (original response)
November 11, 2004 (revised response per Office Action dated 28 October 2004)

Respectfully submitted,



Robert J. McCarthy
Applicant
28 Hatch St
Everett, MA 02149
Tel: 617.387.7793
Fax: 617.389.5822
bob@trakus.com



Office Action Summary

Application No.

10/604,451

Applicant(s)

MCCARTHY, ROBERT J

Examiner

Fred H. Mull

Art Unit

3662

The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-10, 12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.